DOCUMENT RESUME

ED 332 568 HE 024 509

AUTHOR Bunda, Mary Anne
TITLE Faculty Priorities in Course Development.
PUB DATE Mar 89
NOTE 20p.; Paper presented at the Convention of the American Educational Research Association (San Francisco, CA, March 1989).
PUB TYPE Reports - Research/Technical (143) -- Speeches/Conference Papers (150)

EDRS PRICE MF01/PC01 Plus Postage.
DESCRIPTORS *Course Content; *Course Organization; Courses; Curriculum Design; Curriculum Development; Data Collection; Educational Philosophy; Higher Education; *Intellectual Disciplines; Introductory Courses; Questionnaires; *Teacher Attitudes
IDENTIFIERS University of Michigan

ABSTRACT

This study was designed to test a less labor intensive data collection methodology than the extensive interview system developed by the University of Michigan currently used to show the relationship between faculty rationale and course description. Subjects (N=210) were randomly selected faculty members each of whom was responsible for teaching 100, 300, and 500 level courses at a comprehensive regional university with four professional schools. Each faculty subject completed a self-report questionnaire which assessed his or her planning positions in terms of program goals, educational philosophy, instructional mode, and other model-relevant variables and provided a copy of a syllabus for a specific course. Analysis of returned responses (N=124) revealed that there were inconsistencies between the relative influence of each professional school in proportion to the course offerings at the university; hence generalizations to the entire institution could not be made. However, results indicated that faculty are systematically different by disciplinary field with respect to beliefs about education and course planning strategies though most agreed that thinking effectiveness was the overall purpose of education. Faculty in Education and Business, for instance, described themselves as working with majors in academic fields, while the Health and Engineering faculty described themselves as working in units which lead to career entry. Includes eight references and three tables. (LPT)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED332568

Faculty Priorities in Course Development

by

Mary Anne Bunda
Western Michigan University*

HE 024 509

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY
Mary Anne Bunda

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)
X This document has been reproduced as received from the person or organization originating it.
☐ Minor changes have been made to improve reproduction quality.
• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

*A paper presented at the 1989 convention of the American Educational Research Association, San Francisco, CA, March, 1989

BEST COPY AVAILABLE

Research on the instructional process in higher education has tended to concentrate on traditional indices of student perceptions of course quality (Braskamp, Brandenburg, & Ory, 1984), the relative efficacy of insturctional methodologies such as peer tutoring and computer assisted instruction (Dunkin, 1986) or, in recent years, independent assessment of outcomes (Ewell, 1985). Concern for the specific outcomes of instruction has made understanding the college classroom essential. Little is known, however, about how instructors plan a learning experience and the criteria by which they select content and activities. Although, in every University in the country, faculty mythology passes information from one generation of curriculum committee members to another about the rationale used by the various departments within the University. Most departments find ways to meet or exceed the criteria statements required for new course approval, no matter what their real beliefs about the course or program are.

Perceptions of the process of curriculum and course approval sometimes describe a system that is laughably random as in this description by Levine and Weingart:

> each week we traded anecdotes and guesses about the effects of the proposals. The most compelling arguments were based on the experience of a relative or a friend or a friend of a relative at another school where the proposal or something like it had been adopted. Through the magic of parliamentary procedure, we were able to resolve the same issue at several consecutive meetings with any number of different conclusions. Everybody had an equal chance to win, and everybody did one week or another. (1973, p. ix)

Componets of course and curriculum design must be based on clearer criteria, but no one has systematically investigated the faculty member as curriculum developer. Rather support services in instructional development have tried to explain the use of an outside expert as a development aide (Kemp, 1987). A curriculum instruction model recently has been developed by Stark et al (1988) at NCRIPTAL (National Center for Research to Improve Postsecondary Teaching and Learning) at the University of Michigan which hypothesizes that values, educational goals, philosophy and context are important variables in the planning process used

Do Not Cite without Permission

by professors (Stark & Mets, 1988). Stark et al.(1988) have developed an extensive interview system to collect data from professors and students which is then triangulated with a content analysis of the syllabus. The process has been used to describe the planning process of professors at the 100 level introductory course in a variety of settings across a number of disciplinary areas to show the relationship between faculty rationale and course description.

This study was designed to test a modification of the data collection methodology which is less labor intensive. But also, rather than simply describing the positions taken by faculty, the analysis of the data was designed to show that faculty in professional schools differ from their Arts and Sciences colleagues in several important ways. While the results of the data analysis may produce no surprizing information, it may explain why cross-departmental institutional committees composed of faculty from various colleges have difficulty dealing with questions of course approval and content rationales. The belief statements concerning education and steps in curriculum development are substantially different across the colleges and substantially ignored during discussions of course approval at the institutional level. However, there is a great deal of consistency concerning the primary purpose of a college education.

Method

A survey was conducted by drawing a random sample of courses from the Fall, 1987 schedule of classes from a single institution. The institution is a comprehensive regional institution with a Doctoral I Carnegie Code of over 20,000 students with four professional colleges. The sample consisted of 210 faculty members who were each responsible for one of the courses drawn, i.e., the sampling plan was a random sample of courses at three levels without duplication of instructor. The survey was conducted with faculty who teach 100, 300 and 500 level courses randomly selecting one-third of the instructors at each level within department. The 100 level courses are almost exclusively discipline based. However, they are not all

Do Not Cite without Permission

general education courses, courses at the 100 level in the professional schools tend to be remedial skill building courses rather than introductions to the profession. The 300 level courses are second or third level courses for the discipline delivery departments which generally concentrate on a specific sub-discipline, but introductory courses in the professional schools. The 500 level courses are advanced study in both the disciplinary departments and the professional study departments. These courses are supposed to be designed at the introductory graduate level of instruction, but allow the enrollment of advanced undergraduates. Thus, each of the course levels of instruction is introductory in nature for all or part of the sample. All courses which were exclusively field experiences, readings, or individual instructional contracts were eliminated from the sample. This range of courses will provide an adequate base from which to detect systematic variation with respect to either level or locus of delivery. The procedure used in drawing the sample was designed to result in a group of courses and professors which were representative of the institution as a whole rather than the offerings of any one department or college.

The survey directions for the faculty requested that they: 1) fill out a self report questionnaire which assessed their planning positions in terms of program goals, educational philosophy, instructional mode and other model relevant variables developed by the NCRIPTAL staff and 2) provide a copy of a syllabus for a specific course. The request for the syllabus was primarily to help the faculty respond to the questionnaire with respect to a single course rather than the full range of courses in which they provide instruction, because of the complex nature of the questionnaire. The questionnaire was 20 pages in length covering over 200 unique questions. Thus, a faculty member could easily drift from a single course perspective to a general course development perspective while proceeding through the questionnaire. Preliminary analysis of the questionnaire information showed no use of student produced

Do Not Cite without Permission

information in the development of courses. Follow-up interviews were conducted with a sample of faculty on targeted issues of development to enrich the meaning of selected terms.

Results

The questionnaires were returned by 124 faculty resulting in a 59% response rate. The response rate varied substantially by college from 33% in Business to over 70% in both Education and Health. The relative influence of each of the professional schools in the data set, then, was not consistent with the proportion of course offerings at the University. However, the data set was composed of 38% respondents affiliated with professional programs, thus it was representative of a complex institution rather than only the liberal arts course offerings. The low number of returns in some of the colleges, however, precludes the possibility of analysis by individual college. Additionally, if one were to describe representativeness as a proportional representation of each department in the University in the sample, the representativeness of the sample was contaminated at the outset by unique uses of the course numbering system across departments and colleges. That is, some departments offer a wide range of 200 and 400 level courses, but very few 500 level courses causing them to be under-represented in the sample. Other departments structure their offerings almost exclusively at the 300 and 500 level causing them to be over-represented. This non-random variation was unknown to the researcher at the design phase of the sampling plan. Even though the exact nature of the sample is not proportional to the institution and, thus, generalizations to the entire institution would be inappropriate, it does reflect the aggregate views of faculty in a complex institution adequately. Generalizations to the institution may be inappropriate under any condition of representativeness, because the directions of the study ask the faculty to respond to the questions with respect to one particular course. The extent to which faculty beliefs and strategies change from one course to another is a question open for further research.

Demographics

The sample of faculty in the response group was very experienced with an average of 21 years of service in post secondary institutions. Eighty percent of the respondents were male. For the most part, the faculty perceived that students exhibit modest effort in their courses and are somewhat prepared to address the material in their courses. Most of the faculty were responding to the questionnaire with respect to a course in which they were very experienced. The median number of times they had taught that particular course was 10, with only 16% of the sample having 2 or less experiences with the particular course.

Faculty were asked to characterize the organizational unit within which they taught as primarily responsible for: 1) general education, 2) training majors in academic fields, 3) the preparation of students for career entry or 4) the preparation of students for graduate and professional schools. A review of the selection of alternatives in this characterization by college showed that the faculty from professional colleges, i.e., Education, Health, Business and Engineering, selected the alternatives in two very different ways. Faculty in Education and Business described themselves as working with majors in academic fields, while the Health and Engineering faculty described themselves as working in units which lead to career entry. This systematic variation in self-report was the basis for the creation of 3 college types out of the seven colleges in the University: A) Direct career entry colleges, B) Professional program colleges which see majors as an academic focus, and C) Discipline based colleges with academic majors who also serve the general education program of the institution. It should be noted that the difference between colleges of type A and B are purely on the basis of faculty self-report. Both types of colleges have professional accrediting agencies and both types offer programs beyond the bacheloriate level at the institution under study. However, faculty in the College type A self-report that their programs are designed for direct career entry, while faculty in

Do Not Cite without Permission

type B report that they are preparing academic majors. It may be that the sample of faculty from those colleges have different perspectives concerning the necessity for Master's degree work in their profession.

Before addressing their own views on education, faculty were asked to rate the extent to which a number of characteristics were true about their college and their program. The directions on the questionnaire asked that they view the word college as University. However, resulting differences in perception may indicate that the faculty were, indeed, rating their College rather than the University. Each of the elements of academic programs was seen as more true of the program level than of the collegiate level. That is, they consistently see their program as more distinctive, more integrated, more dedicated to teaching and more applied than the college programs in general. The faculty at this institution see teaching as a more important collegiate goal than research. The rating of the role of research in the program produced significant differences by college type. The direct career entry and professional programs see research as less a part of their program description than do the disciplinary departments. The disciplinary departments rated the research goal as more true of their program than of the general college program, as they did with other elements of programing. However, the centrality of research as a goal in the professional and career entry colleges was viewed as more important at the college level than at the program level. The questionnaire did not ask about the centrality of service to the field as a mission of the program or the University. It may be that faculty in the applied or professional fields see work with the field as more central to their program than it is to the University. The service relationship between field sites and professional training schools is clearly as important as research in a discipline. Additionally, direct career entry faculty see programs as substantially more prescribed and tightly coordinated than do their colleagues in the disciplinary departments. The prescriptiveness in

the programs while real, i.e., students have little flexibility in course selection is the result both of the demands of accreditors and faculty preference in curriculum planning.

The remainder of the results section will deal with three topic areas covered in the questionnaire across the three blended colleges. While a great deal more information was collected from the faculty, time does not permit a detailed analysis here. The three topics, however, will show the major value differences which exist across the faculty and similarity in behaviors. The topics selected for this discussion are Program Intents, Beliefs about the ends of education and First Steps taken in course design.

Program Intents

The faculty were asked to rate five different statements concerning general planning beliefs at the program level. These statements were the extent to which the program was: 1) student directed, (allowed student flexibility), 2) constrained by employer needs as interpreted by the program faculty, 3) hierarchical (courses arranged in a sequence), 4) linked to other disciplines, and 5) constrained by forces outside of the program over which the program faculty have no control. Overall faculty said that their programs were hierarchical in nature (mean 3.5 on a 5 point scale) and not controlled by University personnel other than program faculty (mean 2.04). The only items which had mean ratings in the "not like my program" range were those that implied other individuals (committees, chairs, etc.) had control over content or course selection. On three of the items there were significant differences across the colleges. Table 1 shows the mean value for each of the items. Notice that the expected difference among the colleges with respect to the constraints by employers is in the mid-range of the scale where disciplinary faculty find this constraint slightly less true and professional faculty find it slightly more true. The largest, most striking difference occurs with respect to the degree to which faculty believe that their program is sequential in nature. Courses in the career entry

and professional schools are clearly planned to build upon previous work, while that is not as true in the disciplinary colleges. Second, notice that the professional and career faculty see their programs as more linked to other departments than do the disciplinary faculty. The hierarchical nature of the program has serious implications for the extent to which faculty are concerned with achieving their ends in a particular course. Follow-up interviews were conducted with a small sample of faculty to elaborate upon the meaning of hierarchical. In the professional schools, faculty indicated a strong belief in the skill building nature of lower division courses with professional courses building upon each other. Faculty in the Arts and Science areas emphasized that each upper division course addressed a different aspect of the discipline. The order in which students proceed through these scope building experiences was, in their words, inconsequential. Subspecialties develop within majors as students select from an array of available alternatives.

Beliefs

Faculty were presented with eight general belief statements about the purpose of education. They were asked to select the statement which conformed most closely to their beliefs and then to rate each of the statements on a five point scale to indicate the degree to which each statement was like them. The purpose statement most often selected by the faculty in this institution was very similar to the national results presented by NCRIPTAL -- 63% of the faculty selected "Effective Thinking" as the purpose closest to their own beliefs. Thus advancing the belief that a questionnaire procedure produces data comparable to the in-depth interview procedure used by the national center.

The highest median value over all of the faculty was on the item which specified Effective Thinking as the purpose of education at a value of 5. The elaborated statement on the questionnaire specifies that the skill, i.e., effective thinking, is one which is generalizable

Do Not Cite without Permission

across a wide range of content matters. Table 2 displays the college means on the belief items which produced no significant differences. In some cases, the means are so close to each other, one might speculate consensus. The extent to which faculty assent to these statements is clear at the two ends of the agreement continuum. A majority of faculty selected effective thinking as closest to their belief and all faculty gave that the highest mean rating with respect to closeness to their own belief. At the other end of the spectruum, no faculty selected education as constrained by college mission and resources as like their individual belief and the mean rating was the lowest for each of the colleges. Constraints of Mission and institutional resources are likely to be more important in a less complex organization. The rank order of the agreement level of the other items is contaminated by items presented on Table 1 which displays significant differences in agreement by college. Thus, the rank order of these items cannot be adequately defined for the total group. Between seven and eight per cent of the faculty selected four of the statement as most like themselves. Therefore, the selection rate does not help with positioning the importance or incidence of beliefs: 1) Social change, 2) Instructor control over learning, 3) Earning a living, and 4) Clarifying values.

Table 1 shows the three purpose statements which resulted in significant differences with respect to mean ratings across the three college types. Note that in each case either one or both of the career oriented colleges show stronger assent to the purpose statement than do the faculty in the disciplinary colleges. In all cases, the faculty in the professional and career colleges ascribe beliefs about education as a complex set of outcomes as opposed to their colleagues in the disciplinary departments who have a more focused view of education. While the clear relationship between training for a profession and earning a living is to be expected, the differences in Personal Enrichment and Values Clarification were investigated through follow-up interviews. The case built for Personal Enrichment was particularly interesting. Faculty,

Do Not Cite without Permission

in both Business and Engineering, cited concerns that their accrediting agencies and professional organizations had with respect to Liberal Education. In each case the faculty emphasized the critical nature of development which occurs in high quality general education course work and the extent to which professional practice is enhanced by general education. Flexibility in the profession is enhanced by a broad based liberal education.

First Steps

Faculty were asked to select from eight positions the first steps in their course planning process. While the use of content matter is the starting point for a plurality of faculty in each of the colleges, the second most selected starting point varies among the colleges. Table 3 shows the selection rate of the top four first steps: 1) Content matter, 2) Student needs and goals, 3) College mission, employers and Accreditors, and 4) Personal background and experience of faculty. There is a significant difference in the distribution of selection across the colleges for these four items. The table shows the percent of faculty within a college type who selected the item. While this table does not show all 8 possible selections, it does not distort the results. Twenty faculty made no selection or selected more than one alternative. No faculty indicated that they used either student evaluations of previous offerings or student performance on previous exams as a starting point. Fifteen faculty were eliminated from Table 3 because they selected the availability of resources such as textbooks and labs or they selected the uses of learning theory/experience based selection of activities as the starting point in their planning. Note that in planning courses there is a difference among the colleges with the second most popular starting point. The career and professional college faculties are apt to use student goals and the college mission, whereas the disciplinary group is apt to use their own backgrounds and teaching experience.

In rating the extent to which any of these starting points represent typical behaviors, the

Do Not Cite without Permission

highest mean rating was given to content matter (4.37 with a median value of 5). The next highest overall mean value was associated with the use of student goals and needs on which a significant difference occurred across the college types. When contrasting the information in Table 3 with Table 1 we see that not only did faculty across the colleges differ with respect to selecting college goals and needs of students as a staring point, but also the average rating of considering these elements as part of their typical course planning behaviors was significantly different. However, on Table 2, note that faculty in all colleges have a very high mean rating on selecting content, based on their field. The worthwhileness of material in relation to the field is more typical across the board than using accreditors or employers as criteria for course planning. The overall percentage of faculty selecting any of these options as their first step in course development is contaminated by the differential selection rates across the colleges. Thus, it cannot be adequately defined. It is interesting to note on Table 2 the relative lack of use that faculy make of student perceptions of the course and of student performance on examinations. The relative importance of this information is extremely interesting in light of the stability of students over time at institutions (making previous exam data relevant) and the design of most student feedback forms (designed in large part to inform a particular faculty member rather than provide normative information on teaching ability). (Braskamp, Brandenbury & Ory, 1984)

Follow-up information was gathered with respect to each of the student sources of information. A presumption was made about the use of the words "First Steps" as a systematic inhibitor of these data sources as a source of information. Faculy were asked about the level of confidence they had in each sort of data and the extent that it was used at all in course revision as well as development. The student feedback on quality of instruction was summarily dismissed as not useful at all. Faculty at this institution reported the same misinformation as other faculty,

Do Not Cite without Permission

e.g., "ratings represent a popularity contest among faculty" or real research evidence, "required courses get lower ratings" as reasons for not using the information. Student test results were treated in a slightly different manner. While all faculty used measures of student learning to revise a course in progress rather than revise a course for the next offering, systematic differences across college types were found in the way in which revisions occurred. In the career entry and professional colleges, a majority of faculty sought outside assistance for students to overcome deficts in learning, e.g., tutors, study groups, special sessions with the intructor, etc. They did not adjust the proposed coverage of the material in the course or the syllabi. However, a majority of the disciplinary faculty tended to revise the current syllabi by reviewing the material in question with the entire class, dropping or adding some material from the current syllabi. Some faculty immediately slowed or speeded the pace of instruction to accomodate the level of students involved during a particular term. These faculty consider the syllabus a statement of typical outcomes in a course, but do not feel that it is essential. On the other hand, faculty in the professional and career colleges see the syllabus not only as a contract with students taking the course, but also a contract with colleagues who teach subsequent courses. "One does not change a syllabus without discussing the issue with departmental colleagues."

Discussion

The results of this study show that faculty are systematically different with respect to beliefs about education and course planning strategies by disciplinary field. However, for the most part, these differences occur at the second level of importance with respect to education in general. Faculty for the most part have majority agreement about the purpose of education -- thinking effectiveness. Less typical beliefs, e.g. influence of careers or enrichment, do produce significant differences across the faculty. Additionally, although faculty across the colleges

differ in the selection of a first step for course preparation, all faculty report that selection of content with their field as a referent point is most typical behavior for them. Use of the field of study as the primary course development strategy means that the primary determiner for development cannot be shared outside of one's field. These individuals could not understand the nuances of differentiation or respect the use of authorities. Consequently, when explaining a course syllabi to a non-departmental colleague, faculty are apt to use their second or third level rationales -- on which they differ significantly. Thus, faculty present themselves to be different from one another, when in fact, they all use the field as a determiner of content. Additionally, faculty vary with respect to their determination to accomplish all of the material detailed in the syllabus. So that some faculty view the discussion of syllabi as a very serious matter when others see it as a ballpark estimate of what will be covered in the course. Individual faculty are likely to have much greater latitude in material selection across multiple sections in some departments. Common course syllabi are likely to be seen as good pedagogy in some departments and as violations of academic freedom in others.

The views of program intentions set the stage for disagreements among faculty. If a program is both hierarchical and linked to other departments and disciplines as is the program described by faculty in the professional and career entry colleges, faculty are counting on specific learning to take place in courses outside their programs. If professors in the disciplines don't see the hierarchical nature of the program, they cannot fulfill these expectations. A disagreement ensues and rather than talk about the structure of learning patterns or common skill objectives, conversations develop where career needs become the rationale of choice. This generally leads to charges of vocationalism by the disciplinary faculty and counter-charges of uselessness by the professional school faculty. This may be overstating the case because disciplinary faculty may see "service" courses as fitting into a hierarchical

Do Not Cite without Permission

system. But, even in that case, one must wonder the basis on which disciplinary faculty make selections of content matter for the courses.

There is, however, a contradiction in the beliefs and strategies used by faculty in all cases. The most generally held belief about education centers on the generalizability of skills learned by students in class and yet the most typical strategy for course development is the selection of content to be learned. If faculty were more aware of their consensus belief, curriculum reviews could center on the strategies used to teach that skill (along with content), rather than the efficacy of content matter. A clear value in higher education is the primacy of the field or discipline in the determination of the importance of particular content matter. Content selection is obviously done by the expert in the content matter. As Wallace (1985) pointed out through Socratic dialogue, rather than data, syllabi largely list specification of content while the agreed upon skills in thinking, writing or listening are not specifically addressed. The core purpose of undergraduate education which faculty believe to be a generalized skill of thinking is wrapped in the layers of the various contents. But one wonders whether the students get through the hard outer shell.

Do Not Cite without Permission

References

Braskamp, L. A., Brandenburg, D. C. & Ory, J. C. (1984). Evaluating Teaching Effectiveness. Beverly Hills, CA: Sage Publications, Inc.

Dunkin, M. J. (1986) Research on Teaching in Higher Education. In M. C. Wittrock (Ed) Handbook of Research on Teaching (3rd Ed) New York: Macmillan Publishing Company.

Ewell, P. T. (Ed.) (1985). Assessing Educational Outcomes. No. 47 New Directions for Institutional Research. San Francisco: Jossey-Bass Inc.

Kemp, J. E. (1987) Providing for Quality in Teaching, College Teaching, 35, 152-155.

Levine, A. & Weingart, J. (1973). Reform of Undergraduate Education. San Francisco: Jossey-Bass, Inc.

Stark, J. S., Lowther, M.A., Ryan, M. P., Smith-Bomotti, S., Genthon, M., Martens, G., & Haven, C. L. (1988, March). Reflections on Course Planning: Faculty and students consider influences and goals. Paper presented at the Annual Meeting of the American Association of Higher Education, Washington, D.C.

Stark, J. S. & Mets, L. A. (Ed.) (1988). Improving Teaching and Learning Through Research. No. 57 New Directions for Institutional Research. San Francisco: Jossey-Bass Inc.

Wallace, J. (1985, October). What Undergraduates Learn: The Role of Assessment in Large Research Universities. Paper presented at the National Conference on Assessment in Higher Education, Columbia, SC.

Table 1

College type means for Intents, Beliefs and First Steps

Program Intents	Career Entry	Professional Majors	Discipline Departments
1. Constrained by Employers	3.35	2.63	2.28 ***
2. Hierarchical Studies	4.61	4.00	2.95****
3. Linked to other departments	3.13	3.56	2.85*
Beliefs about Educational Outcomes			
1. Earning a living	3.60	3.32	2.43***
2. Personal Enrichment	2.75	3.26	2.35*
3. Clarify Values	3.71	3.74	3.02**
First Steps: Typical Considerations in course planning			
1. Needs & Goals of Students	4.25	4.47	3.71**
2. College Mission, employers & Accred.	3.67	3.68	2.32****

---

* p< .05
**p < .01
*** p < .001
**** p < .0001

Table 2

College type means for Common Beliefs and First Steps

Beliefs about Educational Outcomes	Career Entry	Prof'l Majors	Discipline Departments	Rank Mean Rating	Percent Selection Rate
1) Social change	3.48	3.72	3.05	Undefined	8%
2) Effective thinking	4.44	4.06	4.35	1	62%
3) Instructor control over learning	3.60	3.84	3.36	Undefined	8%
4) Constraint by Mission & Resources	1.96	2.00	1.80	8	0%
5) Major Concepts & Ideas	3.21	3.21	3.26	Undefined	4%
First Steps: Typical Considerations					
1) Content Selection based on field	4.33	4.32	4.34	1	UNDEFINED
2) Background & Experience	3.54	3.63	3.69	Undefined	
3) Resources, Texts, Labs, etc.	4.04	3.37	3.64	Undefined	
4) Learning Theory	3.96	3.84	3.72	Undefined	
5) Student evaluation of Instruction	3.17	3.26	2.68	(7 or 8)	
6) Student Exam results	3.17	3.11	2.66	(7 or 8)	

Table 3

Partial Distribution of faculty selection of typical first step in course planning by college

	Content Selection	Needs of Students	College Mission	Background & Experience	Total
Career Entry	8 38%	5 24%	7 33%	1 5%	21 26%
Professional Major	5 33%	4 27%	4 27%	2 13%	15 19%
Disciplinary	26 59%	4 9%	4 9%	10 23%	44 55%
Column Total	39 49%	13 16%	15 19%	13 16%	80

Chi-Square = 13.31

df = 6

p< .04